IN THE CLAIMS:

1. (Previously Presented) A particle beam image detector employing gas amplification attained by pixel-type electrodes, comprising:

(a) anode strips formed on one surface of a double-sided substrate,

(b) columnar anode electrodes which are joined to the anode strips and extend through the double-sided substrate so as to be exposed at a surface thereof, and

(c) strip-shaped cathode electrodes each having an aperture receiving one columnar anode, each aperture having a radius similar to the thickness of the said substrate, and each aperture having a diameter smaller than the width of one of said anode strips so that the direction of the line of electric force is always perpendicular to said one surface, eliminating any risk of generating an undesired electrostatic field by accumulation of positive ions generated through gas amplification.

2. (Previously Presented) The particle beam image detector as recited in claim 1, wherein each of the anode strips has a width of about 200 to 400 μm.

3. (Previously Presented) The particle beam image detector as recited in claim 1, wherein the anode strips are provided at intervals of about 400 μm, the strip-shaped cathode electrodes each have apertures at intervals of a predetermined distance, the diameter of the aperture being about 200 to 300 μm, and each of the columnar anode electrodes has a diameter of about 40 to 60 μm and a height of about 50 to 150 μm.

4. (Previously Presented) The particle beam image detector as recited in claim 1 further comprising a planar drift electrode facing, parallel to and spaced from said substrate.

5. (Currently Amended) The particle beam image detector as recited in claim 4 ~~1~~ wherein voltage is applied only to the anode strips and to the drift electrode.

6. (Previously Presented) The particle beam image detector as recited in claim 5 wherein the cathode electrodes are oriented perpendicular to the anode strips.

7. (Previously Presented) The particle beam image detector as recited in claim 6 wherein the cathode electrodes are formed on a second surface of said substrate, opposite the one surface.

8. (Previously Presented) The particle beam detector as recited in claim 7 wherein the columnar anode electrodes extend from the anode strips a distance approximating the thickness of said substrate.

9. (Previously Presented) The particle beam image detector as recited in claim 1 wherein the cathode electrodes are oriented perpendicular to the anode strips.

10. (Previously Presented) The particle beam detector as recited in claim 1 wherein the columnar anode electrodes extend from the anode strips a distance approximating the thickness of said substrate.

11. (Previously Presented) The particle beam image detector as recited in claim 10 wherein the cathode electrodes are formed on a second surface of said substrate, opposite the one surface.

12. (Previously Presented) The particle beam image detector as recited in claim 1 wherein the cathode electrodes are formed on a second surface of said substrate, opposite the one surface.